

ABSTRACT

Plastic production has been increased globally due to the increase in the use of plastic, which results in a huge amount of plastic as waste. One of the major constituents of the plastic waste is "Polyethylene Terephthalate (PET)", which is mainly used in soft drink bottles. The recycling of plastic waste for the production of new materials appears as one of the best solutions. This project is focusing to utilize PET bottles for making blocks. PET was mixed with sand, fly ash and/or marble powder in fixed proportions after melting. Those mixes were then used to cast the blocks of 10×8×6 inches. Compressive strength, heat resistance, and water absorption tests were performed on those blocks and their results were analysed and compared with those of conventional concrete block. On the basis of results, it was determined that the "PET Block" has more compressive strength, less water absorption and is more resistant to heat than "Conventional Concrete Block".